

1 1. A rolling mill roll stand comprising:

2 parallel roll shafts rotatably supported by axially spaced first and second

3 bearings;

4 parallel eccentric sleeves containing said bearings, said eccentric sleeves being

5 rotatably supported in a housing, said roll shafts having cantilevered ends

6 that project externally from one side said housing and that are adapted to

7 carry work rolls; and

8 third bearings contained by said eccentric sleeves, said third bearings being

9 arranged to rotatably support said roll shafts at intermediate locations

10 between and spaced axially from both said first and second bearings, said

11 eccentric sleeves being journalled for rotation within and being radially

12 supported by said housing at said intermediate locations.

1 2. The roll stand of claim 1 wherein said third bearings are oil film bearings.

1 3. The roll stand of claim 1 wherein said roll shafts have second cantilevered ends

2 projecting externally from the opposite side of said housing, said second cantilevered ends being

3 adapted to support drive gears.

1 4. The roll stand of claim 1 wherein said third bearings are oil lubricated sleeve

2 bearings having self modulating stiffnesses that increase in direct proportion to the eccentricity

3 of the shaft journal surfaces within said bearings.

- 1 5. A rolling mill roll stand comprising:
2 parallel roll shafts rotatably supported by axially spaced first and second
3 bearings;
4 parallel eccentric sleeves containing said bearings, said eccentric sleeves being
5 rotatably supported in a housing, said roll shafts having cantilevered ends
6 that project externally from one side said housing and that are adapted to
7 carry work rolls; and
8 third bearings contained by said eccentric sleeves and arranged to rotatably
9 support said roll shafts at intermediate locations between and spaced
10 axially from both said first and second bearings, said third bearings being
11 oil lubricated sleeve bearings having self modulating stiffnesses that
12 increase in direct proportion to the eccentricity of their respective shaft
13 journal surfaces.